

Page 3, line 12, replace the heading with the following new heading:

A4 Summary of the Invention

Page 26, replace the paragraph beginning at line 33 with the following paragraph:

A5 The above objects and other objects, features, advantages, and aspects of the present invention are readily apparent to those skilled in the art from the following disclosures. It should be understood, however, that the description of the specification including the following detailed description of the invention, examples, etc. is illustrating preferred embodiments of the present invention and given only for explanation thereof. It will become apparent to the skilled in the art that a great number of variations and/or alterations (or modifications) of this invention may be made based on knowledge from the disclosure in the following parts and other parts of the specification without departing from the spirit and scope thereof as disclosed herein. All of the patent publications and reference documents cited herein for illustrative purposes are hereby incorporated by reference into the present disclosure.

Page 27, line 23, replace the heading with the following new heading:

A6 Detailed Description of the Invention

Page 31, replace the paragraph beginning at line 14 with the following paragraph:

A7

When R⁵ and R⁶ taken together with the nitrogen atom to which they are attached form an "unsubstituted or optionally substituted heterocyclic group", said term "unsubstituted or optionally substituted heterocyclic group" refers to a saturated or unsaturated nitrogen-containing radical, being monocyclic or having multiple condensed rings, such as a bicyclic radical, wherein said heterocycle includes, for example, aziridine, azetidine, pyrrole, pyrrolidine, pyridine, tetrahydropyridine, piperidine, azepine, indole, quinoline, isoquinoline, morpholine, piperazine, etc.

Page 147, replace the paragraph beginning at line 9 with the following paragraph:

A8

Procollagenase was activated by incubation with 2 mM 4-aminophenylmercuric acetate (APMA) at 35°C for 2 hours. The inhibition was assayed using, as a substrate, fluorescein-labeled bovine type I collagen. To a solution of the substrate (0.5 mg/ml) in a 50 mM Tris-HCl buffer, pH 7.5, containing 0.4M aqueous sodium chloride and 10 mM aqueous potassium chloride was added the activated collagenase. The resultant solution was incubated at 35°C for 2 hours. The digestion of the substrate with the enzyme was stopped by addition of 80 mM o-phenanthroline, followed by addition of a porcine elastase solution formed by dissolving 25 μ g/ml porcine elastase in the aforementioned Tris-HCl buffer. The mixture was incubated at 37°C for 10 minutes. To the resulting solution was added 70% ethanol, and a 170 mM Tris-HCl buffer, pH 9.5, containing 0.67M aqueous sodium chloride. Undigested substrates were precipitated by centrifugation at 3000 x g for 20 minutes. The supernatant was collected and the fluorescence was read using an excitation wavelength of 495 nm and an emission wavelength of 520 nm. The inhibitory potency of the compounds was calculated. IC₅₀ represents the concentration of each test

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compound required for 50% inhibition of cleavage of substrates by the enzyme alone. The resulting assay data for representative examples are shown in Table 1, compared with the reference compound. The Reference Compound No. 1 is N-[4-(N-hydroxyamino)-2(R)-n-propyloxymethyl-3(S)-isopropylthiomethylsuccinyl]-O-methyl-L-tyrosine-N-methylamide which is synthesized according to the procedure of USP No. 5,442,110.

Page 149, replace the paragraph beginning at line 8 with the following paragraph:

A9
Prostromelysin was activated by incubation with 20 μ g/ml human plasmin at 37°C for 2 hours, and the reaction was stopped by addition of 2.8 mg/ml aqueous diisopropyl fluorophosphate. The inhibition was assayed using, as a substrate, fluorescein-labeled casein. To a solution of the substrate (1 mg/ml) in a 50 mM Tris-HCl buffer, pH 7.8, containing 10mM aqueous calcium chloride was added the activated stromelysin. The resultant solution was incubated at 37°C for 2 hours. The digestion of the substrate with the enzyme was stopped by addition of 5% trichloroacetic acid. Undigested substrates were precipitated by centrifugation at 3000 x g for 20 minutes. The supernatant was collected, followed by addition of a 0.5M Tris-HCl buffer, pH 8.5. The fluorescence was read using an excitation wavelength of 495 nm and an emission wavelength of 520 nm. The inhibitory potency of the compounds was calculated. IC_{50} represents the concentration of each test compound required for 50% inhibition of cleavage of substrates by the enzyme alone. The resulting assay data for representative examples are shown in Table 2, compared with the reference compound.

Page 159, replace the paragraph beginning at line 1 with the following paragraph:

AID
The following symbols are intended to have the meaning set forth below in the specification and the appended claims.

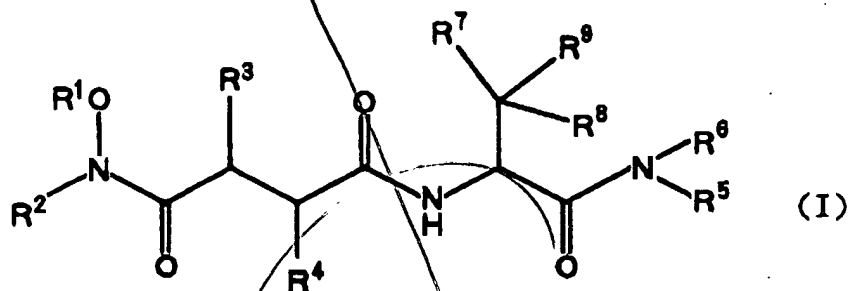
line 10, delete the entire heading.

In the Claims:

Kindly cancel claim 1 without prejudice.

Please amend the claims as follows:

2. (Amended) A compound having the following formula (I):



wherein

All
R¹ and R² are hydrogen;

R³ is selected from the group consisting of (C₁-C₉) alkyl, (C₃-C₇) cycloalkyl-substituted lower (C₁-C₄) alkyl, amino-substituted (C₁-C₆) alkyl, phenyl-lower (C₁-C₄) alkyl, guanido-substituted phenyl-lower (C₁-C₄) alkyl, amino-substituted phenyl-lower (C₁-C₄) alkyl, carboxy-substituted phenyl-lower (C₁-C₄) alkyl, carbamoyl-substituted phenyl-lower (C₁-C₄) alkyl, hydroxy-substituted phenyl-lower (C₁-C₄) alkyl, guanido-substituted lower (C₁-C₄) alkyl-substituted phenyl-lower (C₁-C₄) alkyl, unprotected or optionally protected